Modular Series 450W/650W/1000W Modular Power





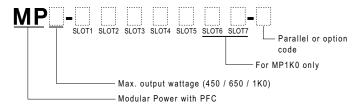


Description

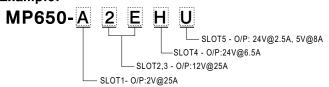
Modular series are switching power supplies with modular design that consist of two stages: front-end PFC and output modules. Using ZVS (Zero Voltage Switching) technology to realize the power factor correction, the line input is rectified into high DC voltage (around 390Vdc) by the front-end PFC stage, and then the DC output modules will transfer the operating voltage into all kinds of DC output voltages from 1.6V~53V. Right now we offer 75W, 150W, 300W single output modules and 100W dual output modules to fulfill all kinds of applications up to 14 isolated outputs.

There are millions of combinations available for the Modular series. Users can configure the DC outputs they need and get the fastest solution for their own power requirement with safety and EMC certificates. No more NRE / safety application charges and long period of waiting for certificates! Providing standard products as usual, MEAN WELL offer you a revolutionary standard power solution that fulfills your custom-made request!

Output Configuration Guide



Example:



Features

- · Millions of output configuration is available
- · Using ZVS technology to reduce power dissipation and improve efficiency
- Universal AC input / Full range
- Built-in active PFC compliance to EN-61000-3-2
- Built-in constant current limiting for single output modules
- · Remote control on each output module
- · Remote sense on each output module (MS-75/150/300)
- · Short circuit / Over load / Over voltage protections for all modules
- Built-in parallel function for MS-300(up to 3 units)
- · Cooling by built-in DC fan with fan alarm function
- · Additional 12V/0.1A auxiliary output for remote control
- · 3 years warranty

Modular Series



General Specification (Please refer to www.meanwell.com for detail spec.)

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MODEL No.	PFC-450 PFC-650 PFC-1000					
AC input voltage range	85~264VAC or 120~370VDC					
Power Factor	PF >0.95 / 230VAC, PF > 0.98 / 115VAC at full load					
AC inrush current (max.)	Cold start, 40A at 230VAC	old start, 40A at 230VAC Cold start, 50A at 230VAC Cold start, 40A at 230VAC				
Max output wattage	450W	650W	1000W			
Efficiency (typical)	83%	85%	85%			
Over temperature protection	Output shutdown, auto-recovery					
Fan alarm	Output shutdown when fan malfunction					
Withstand voltage	I/P - O/P: 3KVAC, I/P - FG: 1.5KVAC, O/P - FG: 0.5KVAC,1 minute					
Working temperature	-20 ~ +50°C@100%, +70°C @ 50% load (refer to output derating curve)					
Safety standards	UL60950-1, TUV EN60950-1					
EMC standards	Compliance to EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024 light industry level, criteria A					
Connection	Input side: 3P/10mm pitch terminal block & JST B3B-XH					
Dimension (L*W*H) (mm)	1) 254x127x63.5 278x127x63.5 278x177.8x63.5					

■ MS-75: 1-SLOT single output (75W max.)

Item Code	Output	★ Peak I	Vdc adj.	Tol.	R&N
L	3.3V, 0~15A	17.3A	2.6~4.0V	±2%	80mV
М	5V, 0~15A	17.3A	4.0~6.0V	±2%	80mV
N	12V, 0~6.3A	7.3A	9.0~13.2V	±1%	150mV
0	15V, 0~5.0A	5.8A	13.2~16.8V	±1%	150mV
Р	24V, 0~3.2A	3.7A	20.0~26.4V	±1%	150mV
Q	48V, 0~1.6A	1.8A	40.0~53.0V	±1%	250mV

MS-150: 1-SLOT single output (150W max.)

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Item Code	Output	★ Peak I	Vdc adj.	Tol.	R&N
Α	2V, 0~25A	30A	1.6~2.6V	±3%	50mV
В	3.3V, 0~25A	30A	2.6~4.0V	±2%	80mV
С	5V, 0~25A	30A	4.0~6.0V	±2%	80mV
D	7.5V, 0~18A	20.7A	6.0~9.0V	±2%	100mV
Е	12V, 0~13A	15A	9.0~13.2V	±1%	150mV
F	15V, 0~10A	11.5A	13.2~16.8V	±1%	150mV
G	18V, 0~8.5A	9.8A	16.8~20.0V	±1%	150mV
Н	24V, 0~6.5A	7.5A	20.0~26.4V	±1%	150mV
I	27V, 0~5.8A	6.7A	25.0~31.0V	±1%	150mV
J	33V, 0~4.7A	5.4A	30.0~40.0V	±1%	250mV
K	48V, 0~3.2A	3.68A	40.0~53.0V	±1%	250mV

MS-300: 2-SLOT parallelable single output (300W max.)

Item Code	Output	★ Peak I	Vdc adj.	Tol.	R&N
2A	2V, 0~50A	57.5A	1.6~2.6V	±3%	80mV
2B	3.3V, 0~50A	57.5A	2.6~4.0V	±2%	80mV
2C	5V, 0~50A	57.5A	4.0~6.0V	±2%	80mV
2D	7.5V, 0~40A	46.0A	6.0~9.0V	±2%	100mV
2E	12V, 0~25A	29.0A	9.0~13.2V	±1%	150mV
2F	15V, 0~20A	23.0A	13.2~16.8V	±1%	150mV
2G	18V, 0~16.7A	19.2A	16.8~20.0V	±1%	150mV
2H	24V, 0~12.5A	14.4A	20.0~26.4V	±1%	150mV
2 I	27V, 0~11.2A	12.9A	25.0~31.0V	±1%	200mV
2J	33V, 0~9.1A	10.5A	30.0~40.0V	±1%	250mV
2K	48V, 0~6.3A	7.2A	40.0~53.0V	±1%	300mV

■ MD-100: 1-SLOT isolated dual output (100W max.)

Item Code	Output	Vdc adj.	Tol.	R&N	Max.	
R	5V, 2.0~10A	4.75~5.5V	±3%	100mV	90.0W	
	5V, 0.0~8A	4.75~5.5V	±3%	100mV		
S	5V, 2.0~10A	4.75~5.5V	±3%	100mV	100.4W	
	12V, 0.0~5.8A	11.4~13.2V	±3%	150mV		
T	5V, 2.0~10A	4.75~5.5V	±3%	100mV	101.0W	
	15V, 0.0~4.7A	14.2~16.5V	±3%	150mV		
U	24V, 0.5~3.0A	22.8~26.4V	±3%	200mV	100.0W	
	5V, 0.0~10A	4.75~5.5V	±3%	100mV		
V	24V, 0.6~3.0A	22.8~26.4V	±2%	240mV	100.8W	
	12V, 0.0~4.7A	11.4~13.2V	±3%	120mV		
W	12V, 1.0~5.0A	11.4~13.2V	±2%	120mV	100.8W	
	12V, 0.0~5.8A	11.4~13.2V	±3%	120mV		
Χ	15V, 1.0~4.7A	14.2~16.5V	±2%	150mV	100.5W	
	15V, 0.0~4.7A	14.2~16.5V	±3%	150mV		

Parallel Connection Accessory			
FAP-001 (For MS-300)			
Series Connection	Series Connection Accessory		
FAS-001 (For 1-slot modules)			
FAS-002 (For 2-slot modules)	•		

- ★ Peak I: 35% duty cycle maximum within every 10 seconds. Average output power should not exceed the rated power.
- ★ Please use MP450-CNPOQ, MP650-A2EHU, MP1K0-2C2CEKL-1.....etc. as the order code. For more detail information about technical issues, please refer to the user manual.
- ★ Please refer to the user manual for more detail information about parallel connection and the parallel codes. About series connection, please contact us or your local MEAN WELL distributor for more details.